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□□□□□□□□□□□□□□ ("□□□□□□□□□□□") ΔFosB□	~35–37 kDa	□□□□□□ □□□□□□□ □ (□□□□□□□) □□□□□□ □□-□ □□□□□□□□□□□□□ □□□□□, □□□□ □□□□ □□□□□□□□□□ □□□□ □□□□□□□□□□□ □□ □□□□ □□□□□□□□ □□□□□□□□□□□□□ □□□□□□□□□□□□□□□ □□□□□ □□□□ □□□□□	□□□□□□□□□□□□□ □□□□□□□□□ □□□□□□□□□□ □□□□□□□□□ □□□□□□□ □□□□, □□□□ □□□□□□□□□□□□□ □□□□□□	□□□□□□□□□□□□□□□□□□ —□□□ □□□□□ □□□□□□□□□ □□□□□□ □□□□ □□□□ □□□□□ □□□□ □□□□ □□□□□□□□□□ □□□□□ □□□□□□□□□□, □□□□□□□□ □□□□ □□□□ □□□□□□□□□ □□□□□ □□□□□ □□ □□□□□□□□□ □□□□□ □□□□□□ □□□□□ □□□□□ □□□□□□□ □□□□□ □□□□□□ □□□□ □□□□ □□□□□□□□ □□□□ □□□□□□□ □□□□ □□□□□

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[illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible]

[illegible] / [illegible]	**ΔFosB-[illegible] [illegible]** [illegible]	[illegible] [illegible]	[illegible]
	[illegible] [illegible] [illegible]		
[illegible]	[illegible]-[illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible]iph[illegible]	[illegible] [illegible] [illegible]	[illegible]
[illegible]	[illegible] [illegible] [illegible] [illegible]-[illegible] [illegible] [illegible]	[illegible] [illegible] [illegible] ([illegible] [illegible] [illegible])[illegible]	[illegible]
[illegible] (4-MMC)	[illegible] [illegible]/[illegible]/[illegible] [illegible]-[illegible], [illegible] [illegible] [illegible] [illegible]	[illegible]—[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible]
[illegible] (bk-PMMA / 4-MeO-[illegible])	[illegible] [illegible]; [illegible] SERT-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] DAT-[illegible] [illegible]	[illegible] [illegible] [illegible]— [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible]/[illegible] [illegible] — [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible]
[illegible] / [illegible] / [illegible] [illegible]	[illegible] [illegible] [illegible], [illegible] [illegible] [illegible]	[illegible] [illegible] [illegible], [illegible] [illegible] [illegible]	[illegible] ([illegible], [illegible]-[illegible] [illegible])[illegible]
[illegible] [illegible] [illegible] / [illegible]	[illegible] [illegible]/[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ΔFosB-[illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]	[illegible]	[illegible]

[illegible] [illegible] [illegible] ΔFosB [illegible] [illegible] [illegible]; [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible], [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]. [illegible] [illegible] — [illegible] [illegible] [illegible]

ΔFosB-[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [

[illegible]	[illegible]?	[illegible]	[illegible]
	[illegible]		
[illegible]	[illegible] CK2-[illegible], [illegible]-[illegible] ΔFosB [illegible], [illegible]	[illegible]	[illegible] ([illegible])[illegible]
[illegible]	[illegible], [illegible]	[illegible]-[illegible]; [illegible]	[illegible] ([illegible], [illegible]-[illegible])[illegible]
mRNA [illegible], [illegible]	[illegible] FOSB-[illegible]—[illegible]	~[illegible]-[illegible] [illegible]	[illegible] ([illegible])[illegible]
[illegible]	[illegible] ΔFosB [illegible], [illegible]	грызунов исследования[illegible] [illegible]; [illegible]-[illegible], [illegible]	[illegible] ([illegible]-[illegible])[illegible]
[illegible] / [illegible]	[illegible] ([illegible]), [illegible]	[illegible], [illegible] ΔFosB-[illegible]	[illegible]

[illegible]: ΔFosB [illegible] steepest [illegible]—[illegible]—[illegible], [illegible]

[illegible]. [illegible]

[illegible] ([illegible])[illegible]

[illegible], ΔFosB [illegible]—[illegible]-[illegible], [illegible] ΔFosB [illegible]

- [illegible], [illegible] c-fos-[illegible], [illegible]: ΔFosB, [illegible] AP-1 [illegible] 1 (HDAC1) [illegible] HDAC1, [illegible] (H3K9) [illegible], [illegible]-[illegible], [illegible]—[illegible] ΔFosB [illegible]
- [illegible]—[illegible] CDK5, AMPA [illegible] GluA2 (GRIA2), [illegible] ARC—ΔFosB, BRG1-[illegible], [illegible] SWI/SNF [illegible]-[illegible] BRG1 [illegible], [illegible], [illegible]-[illegible]

[illegible]: [illegible] "[illegible]" [illegible]—[illegible], [illegible], [illegible]—[illegible] "[illegible]" [illegible] Sections 8 [illegible] 10-[illegible]

[illegible] - [illegible]

[illegible]-[illegible] ΔFosB-[illegible] - [illegible], [illegible] "[illegible]" [illegible]-[illegible] pattern-[illegible], [illegible] induction pathway-[illegible] ΔFosB-[illegible] - [illegible], [illegible] ΔFosB-[illegible], [illegible] ([illegible]/GABA [illegible], [illegible]-[illegible]) [illegible], [illegible]

[illegible]: ΔFosB [illegible], [illegible]

[illegible], [illegible], [illegible]

[illegible]	[illegible]	ΔFosB-[illegible]	[illegible]
[illegible] ([illegible], [illegible])	[illegible]—[illegible]	[illegible], ΔFosB-[illegible] AP-1 [illegible], [illegible]—[illegible], [illegible]	[illegible] ([illegible])
[illegible] ([illegible], [illegible])	[illegible] DAT/NET [illegible]	[illegible]—[illegible] ([illegible], [illegible]-[illegible], [illegible]) [illegible], [illegible], [illegible], [illegible]	[illegible] — [illegible], [illegible]

[illegible]	[illegible]	ΔFosB-[illegible] [illegible]	[illegible]
[illegible] [illegible] [illegible] ([illegible], [illegible])।	[illegible] [illegible] [illegible]-[illegible] [illegible] ([illegible] [illegible])	"[illegible]"-[illegible] [illegible]: [illegible]-[illegible] "[illegible]-[illegible]" [illegible], [illegible] (OAT) [illegible], [illegible]-[illegible] [illegible], [illegible], [illegible]	[illegible] - [illegible]-[illegible], [illegible]
[illegible] ([illegible] [illegible], [illegible])।	[illegible]-[illegible] (GABA-A) [illegible], [illegible] "[illegible]-[illegible]-[illegible]" [illegible]	[illegible], [illegible]—[illegible] GABA-A [illegible] [illegible]/[illegible], ΔFosB-[illegible] [illegible]	[illegible]
SSRIs / SNRIs	[illegible] [illegible]—[illegible]/[illegible] [illegible]	[illegible] ΔFosB-[illegible], [illegible]-[illegible] [illegible] [illegible]-induced "[illegible]" [illegible] ([illegible]) [illegible] discontinuation syndrome ([illegible]) [illegible], [illegible]-[illegible], [illegible]-[illegible] ΔFosB [illegible]	[illegible] ([illegible]); [illegible] ([illegible], [illegible])।

[illegible], [illegible], [illegible], [illegible], [illegible]—[illegible], [illegible]—[illegible]—[illegible] **ΔFosB-[illegible]** [illegible], [illegible]-[illegible], [illegible], [illegible], [illegible]

[illegible]

[illegible] ΔFosB-[illegible] [illegible]—[illegible]/[illegible] MTHFR/MAOA [illegible] ([illegible], [illegible])—[illegible] ΔFosB [illegible]

[illegible]	[illegible]	ΔFosB-[illegible]
P5P ([illegible]-5'-[illegible] — [illegible])	AADC ([illegible]-[illegible] 5-[illegible]) [illegible]-[illegible]	[illegible] D1/PKA/CREB [illegible], [illegible] FOSB [illegible] ([illegible], [illegible]) - [illegible], [illegible], [illegible] [[illegible], [illegible]]
R5P ([illegible]-5'-[illegible] — [illegible] / [illegible])	[illegible], [illegible] MTHFR (C677T [illegible], [illegible] FAD-[illegible]) [illegible] MAOA [illegible]	ΔFosB [illegible], [illegible] (riboflavin) [illegible] MTHFR [illegible] MAOA [illegible], [illegible] ΔFosB-[illegible], [illegible] ([illegible], [illegible]) [[illegible], [illegible]]
[illegible]	[illegible] ([illegible] NMDA [illegible]-[illegible]) NMDA [illegible]-[illegible] CaMKII [illegible]	CaMKII, CK2 [illegible] CK2-[illegible] ΔFosB-[illegible] Ser27-[illegible] ([illegible]), [illegible] ΔFosB-[illegible] [[illegible]]

[illegible]: [illegible], [illegible] ΔFosB [illegible] ([illegible]) [illegible], GABA [illegible]-[illegible], [illegible]

[illegible]. [illegible] - [illegible]

ΔFosB [illegible], [illegible], [illegible], [illegible], [illegible], [illegible]

[illegible] — [illegible], [illegible]

[illegible], [illegible]-[illegible] —[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
FOSB Ser27Ala (S27A)	[illegible] — CK2 [illegible]	[illegible]; [illegible]-[illegible], ΔFosB-[illegible]	[illegible] ([illegible], [illegible])
FOSB Ser27Glu (S27E) — [illegible]	[illegible], [illegible]	[illegible], [illegible] CK2-[illegible]; [illegible]	[illegible] ([illegible], [illegible])

[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]—[illegible]	[illegible]	
FOSB [illegible]-[illegible]/[illegible]-[illegible] [illegible]-[illegible]	PCBP1/SMAD3-[illegible], [illegible]	[illegible]-[illegible] (FosB) [illegible], [illegible] — [illegible] Δ[illegible] (ΔFosB) [illegible]	[illegible] ([illegible])[illegible]

[illegible] — [illegible]-[illegible]

[illegible]-[illegible] ΔFosB-[illegible], [illegible] ΔFosB-[illegible]—[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
CSNK2A1 / CSNK2B (CK2 [illegible])[illegible]	encodes the kinase that phosphorylates ΔFosB at Ser27.	[illegible] CK2 [illegible] ΔFosB-[illegible], [illegible]—[illegible]	[illegible] ([illegible], [illegible])[illegible]
PCBP1 / SMAD3	[illegible], [illegible] ΔFosB [illegible]	[illegible] FosB-[illegible], [illegible] ΔFosB-[illegible]	[illegible] ([illegible], [illegible])[illegible]
ACVR1B (ALK4 [illegible])	SMAD3/PCBP1 [illegible], [illegible]	[illegible] ΔFosB-[illegible]—[illegible]	[illegible] ([illegible], [illegible])[illegible]

[illegible] — [illegible]

[illegible]—[illegible], [illegible], [illegible] ΔFosB-[illegible] ΔFosB-[illegible], [illegible], [illegible] "[illegible]" [illegible]:

[illegible] / [illegible]	[illegible]	**ΔFosB-[illegible]**	[illegible] — [illegible]
DRD1 ([illegible]) [illegible]	D1 [illegible] PKA/CREB [illegible], [illegible] FOSB [illegible]	[illegible], [illegible]	[illegible] — [illegible], [illegible] ΔFosB [illegible]

[illegible] / [illegible]	[illegible]	ΔFosB-[illegible]	[illegible] — [illegible]
CHRNB2 rs2072661	[illegible] ৩' [illegible] (3' UTR) [illegible], [illegible]	[illegible], [illegible] ΔFosB [illegible]	[illegible]— [illegible], ΔFosB [illegible]; ΔFosB-[illegible], [illegible]
DBH rs1541333	[illegible]-[illegible], [illegible]	[illegible]/[illegible], [illegible] ΔFosB [illegible]	[illegible]: [illegible], [illegible] ΔFosB [illegible]

Tier 4 — [illegible]

[illegible] (23andMe-[illegible], [illegible] "[illegible]" [illegible]) [illegible]—[illegible], [illegible] ΔFosB-[illegible]

[illegible]	[illegible]	ΔFosB [illegible]
COMT	[illegible]/[illegible], [illegible] Val/Val = [illegible]; Met/Met = [illegible]	[illegible] [[illegible]/[illegible]]
MTHFR	[illegible]	[illegible] ΔFosB [illegible] [[illegible]]
OPRM1 (A118G)	[illegible]-[illegible]	[illegible]-[illegible]; [illegible] ΔFosB [illegible] [[illegible]]
GABRA2	[illegible]-[illegible]; [illegible]	[illegible]-[illegible] [[illegible]]
FAAH (C385A)	[illegible] A-[illegible]	[illegible] [[illegible]]
MAOA	[illegible], [illegible]	[illegible] [[illegible]/[illegible]]
SLC6A4 (5-HTTLPR)	[illegible]; [illegible]	[illegible] ΔFosB [illegible] [[illegible]]
ALDH2	[illegible]; [illegible]	[illegible], [illegible] ΔFosB-

[illegible]	[illegible]	ΔFosB [illegible]
	[illegible]	[illegible] [[illegible]/[illegible], [illegible]]
CYP2D6, CYP3A4, CYP2C19, CYP1A2, CYP2C9, CYP2B6	[illegible]	[illegible], [illegible], [illegible] ΔFosB [illegible]- [illegible] [[illegible]/[illegible], [illegible]]
HNMT	[illegible]	ΔFosB [illegible] [[illegible]]

[illegible] ΔFosB [illegible]—[illegible], [illegible] FOSB [illegible] (CK2, PCBP1, SMAD3, ACVR1B)-[illegible] sequencing, [illegible] abstinence period-[illegible] biomarker-[illegible]—[illegible], [illegible] clearance-[illegible], [illegible]—[illegible], [illegible], [illegible], [illegible]

[illegible] - [illegible]?

[illegible] ([illegible])

[illegible]-[illegible] ([illegible] 23andMe-[illegible], [illegible]) [illegible]- [illegible]— [illegible] Tier 3 [illegible] Tier 4 [illegible] FOSB [illegible], [illegible], [illegible] engineered Tier 1 [illegible], [illegible]; [illegible]

[illegible] (WGBS)

[[illegible]] [illegible]

WGBS [illegible]—[illegible]—[illegible], [illegible] ([illegible] "WGBS 30x" [illegible], [illegible]) [illegible] Sequencing.com [illegible] WGBS-30x [illegible]-[illegible], [illegible]

[illegible] "[illegible]" [illegible] ([illegible]), [illegible]-[illegible]

[illegible]: [illegible], [illegible] ΔFosB-[illegible] HDAC1/BRG1 [illegible], [illegible] WGBS [illegible], [illegible]-[illegible]; [illegible] ΔFosB [illegible], [illegible]

> WGBS [illegible] - [illegible], [illegible] "[illegible] ΔFosB [illegible]" [illegible], [illegible]

8. [illegible]

[[illegible]/[illegible]], [illegible]

[illegible] "[illegible]" [illegible]—[illegible]-[illegible]

- [illegible] ΔFosB-[illegible]—[illegible]-[illegible]—[illegible] (DAT [illegible], [illegible]-[illegible], GABA-A [illegible], [illegible]) [illegible], [illegible]; [illegible], [illegible] ΔFosB-[illegible]
- [illegible] ΔFosB-[illegible], [illegible], [illegible]-[illegible]-[illegible] ([illegible]), [illegible] "[illegible]" [illegible], [illegible]
- [illegible]: [illegible], [illegible]-[illegible]-[illegible], [illegible] ΔFosB-[illegible] - [illegible], [illegible]

[illegible]-[illegible]— Recovery Kernel [illegible], [illegible], [illegible], [illegible]

[illegible]. [illegible] — [illegible] ([illegible], [illegible], [illegible])

"[illegible]" [illegible]—[illegible], [illegible] ("[illegible]") [illegible]/[illegible], [illegible]—[illegible]

[illegible], [illegible] [illegible], [illegible]

[illegible]	**ΔFosB [illegible] ([illegible])[illegible]**	[illegible]
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[illegible] / [illegible] ("[illegible]")	[illegible]	[illegible]-[illegible], [illegible]
GHB / GBL	[illegible]	[illegible] ΔFosB [illegible], [illegible]—[illegible], [illegible] ([illegible]), [illegible]-[illegible]

[illegible], [illegible] ΔFosB [illegible], [illegible]—[illegible], [illegible]:

- [illegible]-[illegible] ([illegible]) — [illegible]-[illegible], [illegible]

[[illegible]] [illegible] ΔFosB [illegible], [illegible] ([illegible], [illegible], [illegible] ΔFosB [illegible]) [illegible], [illegible] ΔFosB-[illegible]—[illegible], [illegible]; [illegible]

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[illegible]: [illegible]-[illegible], [illegible], [illegible], [illegible], [illegible]-[illegible] (PTSD) [illegible], [illegible], GHB/GBL [illegible], [illegible] ΔFosB [illegible], [illegible], [illegible]

[illegible] "[illegible]", "[illegible]", [illegible]

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[illegible] ([illegible] relapse [illegible])

[illegible] ΔFosB [illegible] (HDAC1-[illegible] c-fos [illegible], BRG1-[illegible] CDK5/GluA2/ARC [illegible]), [illegible]-[illegible] ΔFosB [illegible]

[illegible] ΔFosB [illegible] ΔFosB [illegible] - [illegible] ΔFosB [illegible] ΔFosB [illegible] downstream [illegible] "[illegible]-[illegible]" [illegible]... [illegible] - [illegible] "[illegible]" - [illegible]

[illegible] **ΔFosB-[illegible]** [illegible]

[illegible] [illegible]

[illegible] ([illegible]; [illegible]-[illegible])

ΔFosB-[illegible] AP-1 [illegible] ([illegible] JunD-[illegible]), [illegible] —[illegible]

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